

# CHIEF OF MAINTENANCE STUDY GUIDE

A written examination for the class of **CHIEF OF MAINTENANCE** to be administered in **SHREVEPORT** on **SEPTEMBER 18, 2008**, will consist of approximately **112** multiple-choice questions. The examination will test your knowledge in the following subject areas:

SUBJECT AREA/KNOWLEDGE	APPROXIMATE % OF EXAM
<b>STEERING, SUSPENSION, AND BRAKE SYSTEMS</b>  Knowledge of steering, suspension, and brake systems sufficient to perform maintenance, make repairs, or adjust the systems when needed.	4.5%
<b>AIR CONDITIONING/COOLING SYSTEM</b>  Knowledge of air conditioning and cooling systems sufficient to perform maintenance and repair when needed.	4.5%
<b>DRIVE TRAIN/LUBRICATING/ELECTRICAL/EMISSIONS SYSTEMS</b>  Knowledge of drive train, lubricating, electrical, emissions, and fuel systems sufficient to perform maintenance, repairs or adjustments to the system when needed.	10.7%
<b>ENGINE MECHANICS</b>  Knowledge of gasoline and diesel engines sufficient to perform diagnosis of mechanical problems and to perform maintenance and repair.	4.5%
<b>GENERAL AUTOMOTIVE MAINTENANCE, REPAIRS, INSTRUMENTS AND TOOLS &amp; APPARATUS EQUIPMENT</b>  Knowledge of general automotive equipment sufficient to troubleshoot, diagnose and repair malfunctioning components, including the use and care of instruments and tools; and knowledge of fire apparatus sufficient to perform maintenance on or make repairs to hydraulic equipment.	6.6%
<b>INSPECTION, MAINTENANCE, TESTING, AND REPAIR OF PORTABLE EQUIPMENT</b>  Knowledge of portable equipment, tools, and accessories commonly carried on fire apparatus sufficient to perform maintenance and repairs, including nozzles and nozzle assemblies, and fire hose and hose couplings.	6.6%

<b>SUBJECT AREA/KNOWLEDGE</b>	<b>APPROXIMATE % OF EXAM</b>
<b>MANAGING EQUIPMENT/PROPERTY/SUPPLIES</b>  Knowledge of the management, maintenance, and purchasing of equipment, property, and supplies, including self-contained breathing apparatus, inventory control, and the preparation of specifications on new equipment for bids, and verifying that equipment is tested and meets applicable standards.	12.5%
<b>BUILDING SERVICES</b>  Knowledge of the tools and equipment necessary to install, perform maintenance and make repairs to heating and cooling systems, plumbing systems, including pipes, faucets, and other components, carpentry; and electrical systems, including switches, wiring, connections, and component parts.	8.9%
<b>RECORDS/REPORTS</b>  Knowledge of effective records-keeping and maintenance practices, including preparation, content, format, control, and retention; and knowledge of effective report preparation procedures, including the compilation and organization of data into an effective written format for reports.	6.6%
<b>SUPERVISION</b>  Knowledge of the practices and techniques used in effective supervision in order to plan, organize, direct, and evaluate the work of subordinates, to resolve conflicts, and to maintain discipline.	15.2%
<b>AUTOMOTIVE MAINTENANCE SERVICE MANAGEMENT</b>  Knowledge of the principles of effective automotive maintenance service management in order to perform required duties; personnel management; and knowledge of effective public relations practices which foster a positive public image of the division through contact with the public.	15.2%
<b>FINANCIAL MANAGEMENT</b>  Knowledge of financial management and planning processes of a public agency, including budget preparation, bookkeeping procedures, and overseeing the expenditure of budgeted funds.	4.5%

## REFERENCE LIST

While the entire list of reference material will be useful to you in your preparation for the upcoming examination, the **majority** of test questions are sourced from those references listed under the Primary List.

### **PRIMARY REFERENCE MATERIAL**

#### **INTERNATIONAL FIRE SERVICE TRAINING ASSOCIATION (IFSTA)/ FIRE PROTECTION PUBLICATIONS** (Training Manuals):

Respiratory Protection for Fire and Emergency Services, 1st ed., 2002.  
Essentials of Firefighting, 4th ed., 1998.  
Fire Hose Practices, 8th ed., 2004.  
Pumping Apparatus Driver/Operator Handbook, 1st ed., 1999.  
Aerial Apparatus Driver/Operator Handbook, 1st ed., 2000.

**MODERN AUTOMOTIVE TECHNOLOGY**, James E. Duffy, The Goodheart-Willcox Co., Inc., 2004.

**EFFECTIVE SUPERVISORY PRACTICES**, International City Management Association (ICMA), 1120 G Street, N.W., Washington, D.C. 20005, 4th ed., 2005.

**NOTE: Obtain through LSU Firemen Training Program or IFSTA Fire Protection Publications.**

#### **ADVANCED SUPERVISORY PRACTICES**

#### **NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) PUBLICATIONS AND STANDARDS:**

**MANAGEMENT IN THE FIRE SERVICE**, Carter, Harry R., and Rausch, Erwin, NFPA, Quincy Mass., 3rd ed., 1999.

**BASIC HOMEBUILDING**, Ortho Books, Box 5006, San Ramon, CA 94583-0906, 1st ed., 1991.

The local civil service board should make this study guide available to all applicants in whatever manner the board deems appropriate.

While there are no provisions requiring this office to provide study guides for any competitive or promotional examinations, such material will be provided as a service to assist applicants in preparing for an examination. The State Examiner's office has no control whatsoever over the local availability of reference material (mentioned in the study guides), nor do we feel constrained to limit examination questions to only that material which is available locally. Examination content, weighting of subject areas, and length of examination, may vary with each administration of an examination to reflect any updated job analysis information. Percentages and numerical estimations are provided as approximations.